

Madigan Army Medical Center Referral Guidelines

Hypertension

Diagnosis/Definition

Persistently high arterial blood pressure despite attempts to optimize the blood pressure.

Initial Diagnosis and Management

- Assure an appropriate size blood pressure cuff is used. Persons with large arms need to have a large blood pressure cuff.
- It is best to determine that blood pressure greater than 140/90 persists after three visits with a physician, as many patients will have transient high blood pressures due to stress of seeing a new physician.
- Assess the patient for evidence of secondary hypertension suggested by onset of hypertension before age 20.
- Patients who have new onset hypertension after 50 years of age, no family history of hypertension, unprovoked hypokalemia, symptoms of pheochromocytoma (to include headaches, sweating, or palpitations), hypercalcemia or intrinsic renal disease should be evaluated for secondary hypertension. Consider Nephrology consultation for assistance with this evaluation.

Ongoing Management and Objectives

There are many approaches to the treatment of hypertension:

- Conservative therapy should be used at least as an adjunct, if not as initial therapy, to include weight loss, abstaining from alcohol, avoidance of NSAIDS, and exercise as appropriate for the level of the patient's condition, smoking cessation, and a low salt diet.
- The best approach is to use the least expensive regimen that is tolerated by the patient and is effective in controlling the blood pressure. Exceptions include (see JNC7) ACE inhibitor for patients with Diabetes Mellitus and hypertension, Beta-blocker for patients with ASCAD and/or Left Ventricular Hypertrophy.
- Many patients will eventually need combinations of medications with different, synergistic mechanisms of action such as an ACE inhibitor and a diuretic.
- The differential diagnosis with new onset hypertension in children and young women should include reno-vascular causes, such as fibromuscular dysplasia, which may be easily evaluated with duplex scanning.

Indications for Specialty Care Referral

Nephrology referral:

- Inability to adequately control the blood pressure with triple drug therapy.
- Suspicion for secondary causes of hypertension.
- Renal and renal/pancreas transplant.

Vascular Surgery referral:

- If renal artery stenosis is suspected the patient should be referred to the vascular lab for a renal arterial duplex scan followed by a surgical evaluation.

- Children and young women with new onset hypertension to rule out fibromuscular dysplasia.

Criteria for Return to Primary Care

Evaluation of hypertension is complete, and blood pressure is adequately controlled.

Last Review for this Guideline: **January 2010**

Referral Guidelines require review every three years.

Maintained by the Madigan Army Medical Center - Quality Services Division
Clinical Practice and Referral Guidelines Administrator